

# MY TEAMBATH PLACEMENT (SO FAR)

---

Greg Robinson

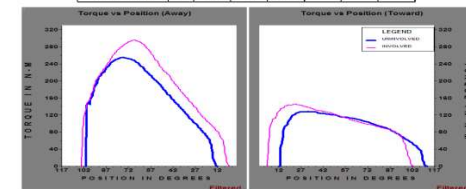
# INTRODUCTION WEEK TESTING



**Comprehensive Evaluation**

Name: greg robinson      Session: 08/08/2022 14:07:06      Windowing: Isokinetic  
 ID: gr24092000      Involved: None      Protocol: Isokinetic Bilateral  
 Birth Date: 24/08/2000 (dd/MM/yyyy)      Clinician:      Pattern: Extension/Flexion  
 HT: 183      Referral:      Mode: Isokinetic  
 WT: 76.8      Joint: Knee      Contracton: CON/CON  
 Gender: Male      Diagnosis:      GET: 24 N.M at 0 Degrees

# OF REPS: Right 3	EXTENSION 60 DEG/SEC			FLEXION 60 DEG/SEC			
	INVOLVED	DEFICIT	DEFICIT	INVOLVED	DEFICIT	DEFICIT	
PEAK TORQUE	N.M	254.7	295.8	-61.1	128.2	145.5	-13.0
PEAK TOWW	%	335.9	390.1		169.1	191.9	
TIME TO PK TD	MSEC	410.0	610.0		330.0	330.0	
ANGLE OF PK TD	DEG	76.0	68.0		32.0	33.0	
TORQ @ 30.0 DEG	N.M	110.9	149.9	-66.1	127.2	140.0	-16.1
TORQ @ 6.10 SEC	N.M	216.8	201.4	7.1	123.3	136.1	-10.6
COEFF. OF VAR.	%	4.0	4.0		2.8	2.6	
MAX REP TOT WORK	J	270.9	337.2	-24.5	168.1	185.2	-10.2
MAX WORK REP #	#	1	1		3	1	
WRK/BODYWEIGHT	%	357.3	444.8		221.7	244.2	
TOTAL WORK	J	810.1	978.4	-20.9	461.7	540.3	-17.0
WORK FIRST THIRD	J	270.8	336.7		156.6	204.1	
WORK LAST THIRD	J	207.3	317.3		131.5	117.8	
WORK FATIGUE	%	-1.3	5.7		16.0	42.3	
AVL POWER	WATTS	175.7	201.3	-14.6	93.8	97.5	-3.9
ACCELERATION TIME	MSEC	10.0	30.0		30.0	30.0	
DECELERATION TIME	MSEC	50.0	30.0		290.0	40.0	
ROW	DEG	95.4	100.7		95.4	100.7	
AVG PEAK TD	N.M	246.3	292.6		124.5	141.9	
ADONANTAG RATIO	%	50.3	49.2		0	81.0	





## LTA FEMALE ATHLETE WORKSHOP



### THE FEMALE ATHLETE

A healthy menstrual cycle can be different for everyone. But it is a vital sign of good health. Contributes to bone and immune function and brain and heart health.



### BE UNDERSTANDING

Make talking about a player's cycle a normal thing. It's not an interrogation but a conversation about how they feel and what they can do about it. Use consistent language.



### ENSURE THEY ARE EATING ENOUGH

The most common cause of a missed, disrupted or more painful cycle is a lack of sufficient nutrients in the diet.



### INJURY PREVALENCE

Females are more likely to suffer ACL injuries. Therefore it's important to develop good knee and ankle stability.

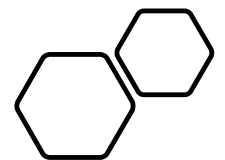


### CORE TEMPERATURE

Females core temp drops faster so ensure they put a towel over their shoulders at change of ends and engage in active recovery post match.

### BODY IMAGE

During adolescence particularly people have hyper awareness of their body. Create an environment where players feel comfortable sharing their feelings. Be open and understanding and maintain good dialogue with parents.



## Events and Conferences

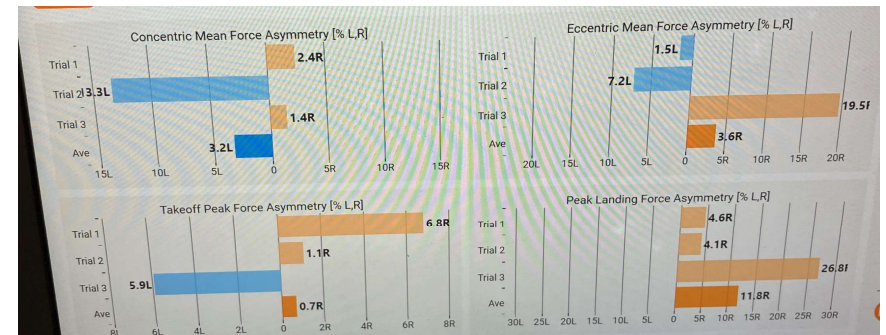
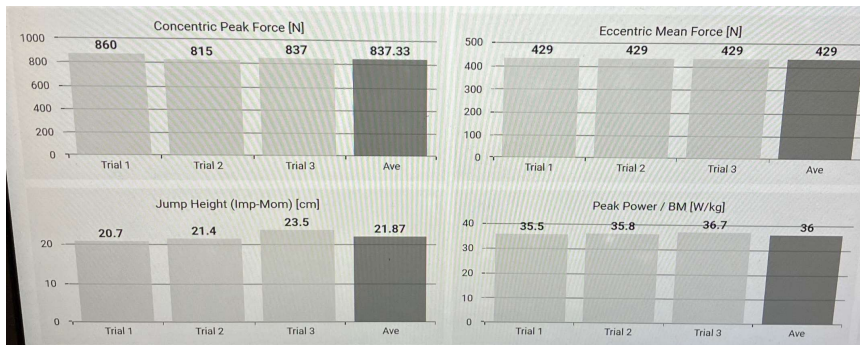
- Attended the LTA Female Athlete Workshop.
- Looking to attend Sportsmith Speed Conference later in the year.

# A TYPICAL WEEK

	15 Sun	16 Mon	17 Tue	18 Wed	19 Thu	20 Fri
7 AM		Super League Netball		Super League Netball		Super League Netball
8 AM		BUCS Swimming		BUCS Swimming		BUCS Swimming
9 AM		BUCS Netball				BUCS Netball
10 AM						Mens Movement
11 AM		Women's Movement	Triathlon		Triathlon	Women's Movement
12 PM						
1 PM		Juniors Movement				
2 PM		Seniors Gym	RPDC	Seniors Gym	Gabe Fishlock CPD - Plyo Gabe Fishlock	Placeholder TBC Luke Wilkinson
3 PM						
4 PM		Tennis HPG	RPDC	Tennis HPG	RPDC	
5 PM						

# ForceDecks Testing.

- Had the opportunity to frequently use and analyse ForceDecks platforms. Moving forward will use data to inform some programming decisions.



# CPD & Tasks

Over the course of the year have 8 tasks to complete, varying from informational videos to mock UKSCA exams.

- Hamstrings are working eccentrically as the bar is descending
- This can lead to muscle damage due to tears in the sarcolemma and other connective tissue
- As a response increased IGF-1 release
- Leads to muscle hypertrophy
- Often used in strength training blocks



1

### Basic Physical Demands

- Game consists of highly rapid accelerations and decelerations with many changes of direction.
- High number of jumps, leaps and landings: Due to the foreword risk landings are very hard and put a lot of stress through the lower body.
- Small court and restrictions on where players can be means the movements are very explosive and repetitive.
- There is a large difference in distances covered between positions: GK/GS (1) often netball average around 4km per game (2) opposed to a centre who reaches up to 36km. Centres are active for 85% of the time, other positions for around 70% and GK/GS for 50%.

2

### Injury Prevalence

- Non-contact landing mechanisms are a significant cause of injury (especially ACL). Landings are very frequent and on unstable planes, can also lead to patello femoral tenderness.
- ACLs need to be able to dissipate energy with no help. Overloaded hip and knee flexion during landing increases ACL loading. Hamstrings also play a key role as ACL agonist - resist shear forces.
- 85% of injuries are ankle sprains with 25% being medial malleolus. 15% of injuries occur during rebound.
- Important to have bilateral symmetry to cope with GRF (3.5-5.5 BW MSST) which are often during single leg landings.
- Patellas tend to be more quad dominant and often players are predisposed to valgus knee position, which increases likelihood of knee injuries.
- Physical contacts occur regularly despite the rules, meaning there are lots of landings where off-balance.

3

### Energy Systems Contributions

- 01** ATP-PCr System: This provides an immediate source of energy for high intensity activities. Work duration often fall between 1 and 2 seconds, with average 90% time of control, being 2.4 seconds, showing the importance of this energy system.
- 02** Glycolysis: For sustained high intensity efforts where ATP-PCr systems cannot meet energy demands. These can often last for a game where there is little time remaining and muscles become more fatigued.
- 03** Oxidative System: Important during moments of lower intensity and during recovery after between quarters or during moments where players are not actively involved due to most movement restrictions.

4

### Physical Components of High Quality On-Court Performance

- Characterised by efficient movement patterns and ability to repeat high intensity movements - underpinned by C.O.D & jumping ability and a good M.A.S. This aerobic capacity can be developed through on court drills and small sided games.
- Key game deciding moments depend on anaerobic activities - necessitates good max strength, power and speed. Pace accuracy and deceler are more important than max straight-line speed.
- Intensity changes every 6 or so seconds - ability to lower limb to absorb, reapply and produce force extremely important.

5

### Programming Implications

- Importance of knee strength training - improves ability to perform the key movements.
- Ability of landing mechanism should be used. Due to this often taking place during 1-2s when machine will be placed into a 0.1s capacity low to reduce fatigue.
- Strength and Power developed in a mixed manner to allow for adaptation along with fat.
- Requirements include hip flexion due to high deceleration placed on it during matches. Ankle strength and control also important.
- Develop high force, capacity and stiffness quality in hip and knee. Training units continue to work with repeated landings.
- Develop good eccentric control.
- Excess weight training a downer on heart, through drills or SSC.

6

### Session A - Monday

- A - Pin Back Squat 3 x 4
- B - Hip Thrust 3 x 5
- B - Vertical Jump to Broad Jump 3 x 3
- C - Chins 3 x 5
- C - Calf Raise Iso Push 3 x 3 secs e/s
- D - Copenhagen Hold 3 x 20 secs e/s
- D - Side Plank Dips 3 x 8 e/s
- Jumping and Landing Circuit
- Standing Triple Jump - 3 times
- Lateral bound with rotation - 3 x 3
- Skater Jumps - 3 x 16

7

### Session B - Friday

- A - Hang Power Cleans 3 x 3
- B - Deadlift/Squat Variation 3 x 5
- B - Lateral SL Box Jumps 3 x 4 e/s
- C - Barbell Forward Lunges 3 x 4 e/s
- C - Overhead Press 3 x 5
- D - Barbell RDL 3 x 6
- D - Press Up (start as necessary) 3 x 6
- Hip and Ankle Circuit
- Partner Push Lunge - 3 x 6 e/s
- High Lateral Step Up - 3 x 4 e/s
- Side Plank Partner Knee drives 3 x 6 e/s

8

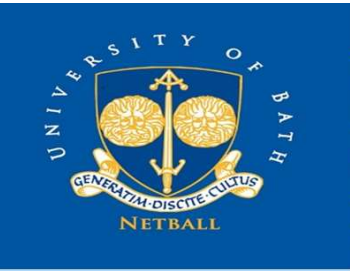
# Understanding of Programming

9 Mon

## Speed / Power

- Wellness (To be completed before 11)
- Super league Wellness  
6 items
- Warm up
- Superleague Netball Warm-Up  
GROUP WARM-UP: 10 MINUTES RAISE: 1. 2-5 minutes bike/skip ACTIVATION-MOBILITY: 2 rounds - SL Glute Bridge x 12 each side - Plate Lateral Lunge x10 - Single-Leg Squat x
- Standing Calf Raise - Max Iso Push  
2 x 3 ea. - 3-5 sec push
- Band Assisted Pogo  
2 x 10 - Can we challenge ourselves to go single leg?
- Main set
- Block Power Clean  
4 x 2 - +2-3 warm up/ build up sets
- Barbell Pin Back Squat  
2 x 3 - +2-3 warm up/ build up sets - Partial Range (45 degrees of knee flexion) - Rest on pins between reps - Develop tension and brace before lifting - Ave. Velocity <0.5 m/s
- Barbell Jump Squat  
3 x 3 -- Ave. Velocity >1.3 m/s
- Explosive Step-Up  
3 x 2 ea.
- Barbell Bench Press  
4 x 3-5 -- Ave. Velocity between 0.75-1 m/s
- Barbell Rollouts  
3 x 5 -- Change direction every 5 reps

Super league get exposure to stimulus along the force velocity curve.



Optional Positional Extra's - Pick Two - 3 sets			
Defence	Single Leg RDL - 8 e/s	Single Arm DB Row - 8 e/s	Deadbugs - 6 e/s
Midcourt	Skater Jumps - 16 reps	Single Leg Glute Bridge - 8 e/s	Med Ball Slams - 6 reps
Shooters	Skater Jumps - 16 reps	Bird Dog - 6 e/s	Adductor Fallouts - 6 e/s

My netball programme is more simplistic but trying to provide players with a good physical baseline.

Exercise	Sets & Reps	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Squat Variation (Goblet/Back Squat) or Leg Press or Leg Extension	3 x 8							
Box Jumps	4 x 5							
Romanian Deadlift or Dumbbell Hinge	3 x 6							
Press up Shoulder Taps	3 x 8 e/s							
Bench Press (Barbell or Dumbbell)	3 x 5							
Weighted Side Lunge	3 x 8 e/s							
Single Leg Calf Raises	3 x 12 e/s							
Side Plank Dips	4 x 8 e/s							

# Areas of Interest and Future Career Direction

Enjoyed working across all sports but preferred team sports.



## Should Isometric training be a staple in Strength and Conditioning programmes?

### Introduction:

Compound lifts, often comprising of concentric and eccentric muscle contractions are common in strength and conditioning programmes. However, exercises with isometric muscle contractions are much less frequently programmed. In recent years they have become more and more popular with an increasing amount of research indicating they have significant physiological benefits. This literature review will explore whether practitioners should now be including isometric exercises in all their strength and conditioning programmes and make recommendations on the nature of these exercises in regards to intended adaptations.





Thanks for Listening

Any Questions?